

Special points of
interest:

- **Nine Pages of
Resources!**



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May 2010

IMSTEA Super Mileage Challenge Awards!



2010 IMSTEA Super Mileage Challenge Awards

The 15th annual Indiana Math, Science Technology Education Alliance's Super Mileage Challenge was held on April 26, 2010.

A total of 51 cars from 39 Indiana High Schools were entered into this unique competition. Under the supervision of faculty members the students applied Math, Science, Technology and Engineering know how to design, construct and test the cars which took 10 laps in up to 25 minutes.

The goal of the event was not for speed, but instead to test their highly fuel efficient vehicles to achieve the highest mpg possible!



Unlimited Class Champion

Mater Dei High School
Evansville, IN
1,004.02 MPG

Stock Class Champion

Greenfield Central High
School
Greenfield, IN
847.36 MPG

Performance Concept Award

(closest to projected
mileage)

PVETI Manufacturing
Academy
98.757%
Cayuga, IN

Best Integration of Math, Science and Technology

Jac-Cen-Del High School
Osgood, IN

Best Design Proposal

Sullivan High School
Sullivan, IN

Craftsmanship Award

South Spencer High School
Rockport, IN

Sportsmanship Award

Warsaw High School
Warsaw, IN

Tenacity Award

Eastern Greene High School
Bloomfield, IN

Horizon Award

(For best performing first-year
school)

West Vigo High School
West Terre Haute, IN

People's Choice Award

Sullivan High School
Sullivan, IN



**http://www.doe.in.gov/
super/2010/01-
January/013010/
documents/
surplus_computer_
request.pdf**



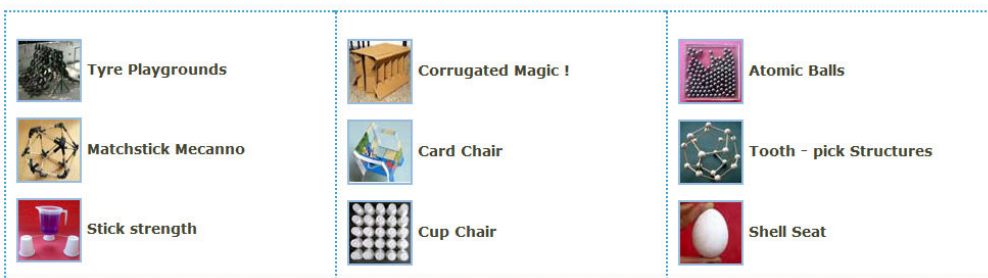
Math-in-CTE is a professional development program developed by the National Research Center

of Career and Technical Education (NRCCTE) and is a curriculum integration model designed to enhance mathematics that is embedded in career and technical education (CTE) content. It is a process that provides the opportunity for math and CTE teacher teams to work together in communities of practice and to identify where math intersects with CTE concepts and applications. This process leads to the creation of math-enhanced CTE

lessons. Please see the [brochure](#), [online application](#), and [outline of the program](#) for more details.

**http://
www.surveymonkey.co
m/s/JHFTY56**

"Strong Structures"



Blender 3-D design and animation software

Blender is the free open source 3D content creation suite, available for all major operating systems

**http://
www.blender.org/**

Toys from Trash

A huge collection of resources, videos about

projects that can be made
from recycled materials
from your classrooms.

**[http://
www.arvindguptatoys.
com/toys.html](http://www.arvindguptatoys.com/toys.html)**

ITEEA Membership Benefits

Our members are classroom teachers from elementary to high school, local and state/provincial supervisors, college/university faculty, and museum staff.

Their common ground is an interest and involvement in technology education. Serving members since 1939, ITEEA brings together

technology education professionals to share ideas, gain professional development, and

improve public understanding of technological literacy.



**[http://
www.iteaconnect.org/
Membership/
MembershipBenefits.
pdf](http://www.iteaconnect.org/Membership/MembershipBenefits.pdf)**



Career Connections

Please select a video



Building Arches

Discussion with an architect about the importance of arches in building structures.

[Explorer.definedlearning.com](http://explorer.definedlearning.com)

Enter the username of:
INDOE and the password:
INDOE to test drive

Defined Learning's Career Explorer in which your students will be encouraged to express interests and activities that they enjoy and translate those interests

into an area of exploration. This exploration will not only lead students down the path of relevancy between classroom studies and 21st century careers, but also better prepare them to begin to discover other careers paths that they may be interested in.

<http://explorer.definedlearning.com>



VU is committed to broadening the dual credit options available to Indiana students and providing them with opportunities to receive hands-on college experience in career and technical areas. With this in mind, we are pleased to announce that beginning in the Fall of 2009, **Project EXCEL will waive the tuition fee** for students enrolled in dual credit courses in select career and technical areas.

http://www.vinu.edu/cms/opencms/academic_resources/project_excel/



[Careers in Transportation Curriculum Initiative for Grades 6-12 Funded by the US Department of Transportation](#)

We are looking for technology teachers at either the junior high or high school level who

would be interested in testing the materials either this spring or next year. We would want the teachers to test one or more of the lessons. They are not required to test the entire module. We are only asking them to test a lesson within the module. Of, course, if they wanted to test an entire module that would be fine. We are offering the teachers a 25.00 stipend for testing

the lesson and giving us written feedback. They may test more than one and be paid accordingly. Initially, there will be about 400 lesson to choose from.

<http://www.transportationcareers.org/>



[PTC Pro/Engineer Academy](#)

Gain nearly 1 million worth of **FREE** CAD Software today!

Welcome to the PTC/ Academy learning portal. Here you will find self directed and self paced tutorials to get you started using your FREE Pro/ENGINEER Wildfire!

<http://www.ptcacademy.com/>



The Energy Story

There are many sources of energy. In The Energy Story, we will look at the energy that makes our world work. Energy is an important part of our daily lives.

<http://www.energyquest.ca.gov>

National Lab Day BETA

A National Barn-Raising for Hands-On Learning

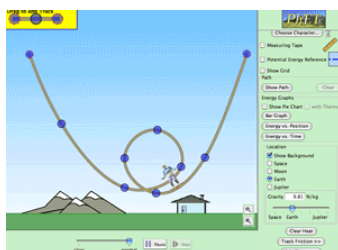
National Lab Day Set for May 12, 2010

May 12 will be the first official National Lab Day! A number of key events in Washington and in selected states are being planned. Not signed up yet? Not to worry: even if May 12 doesn't work for you, National Lab Day is more than just a day. Whether you are looking for help with your science

fair, or maybe someone to host a field trip, advise an after-school program, help with a hands-on activity, or supply some cool lab equipment, National Lab Day can help. At the [NLD website](#) you simply sign up then submit your idea for a project (or what you need in your classroom) and the website matches your request with a STEM professional who has also

joined the NLD hub. (And you can also get funding for your classroom or project by registering on Donors Choose on the NLD site!)

<http://www.nationallabday.org/>



Interactive Energy Simulations and More

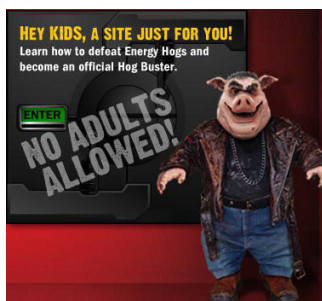
The University of Colorado PhET program has developed research base physics, chemistry,

biology, earth science, and math simulations that are free to use in your classroom.

They also include teacher tested lessons to go along with the simulations. This can help students make connects between real world situations and the unseen scientific phenomena behind it.

Check out the great simulations related to energy under the physics tab at:

<http://phet.colorado.edu/index.php>



Energy Hog

Alliance to Save Energy's Energy Hog Challenge is a great resource for the classroom.

Their Web site provides classroom activity guides about different sources of energy, energy use at home, and how to save energy.

The activities incorporate Science, Math, Technology, Language Arts and Social Studies standards for grades 2-6.

They also provide interactive games for students to play and learn about additional ways to save energy.

<http://www.energyhog.org/>





Engineering Alliance, a partnership among Project Lead The Way (PLTW), TSA and SkillsUSA has been launched and is now available for pre-engineering programs. Designed for PLTW middle and high school programs, Engineering Alliance provides a limited number of online

competitions and leadership activities. All components are online and accessed through the Engineering Alliance website. Current TSA chapters may choose to also affiliate with Engineering Alliance. Be among the first 200 programs to affiliate with Engineering Alliance and receive Founding Partner status - immediate access to program components through the 2010-2011 school year, a Founding Partner plaque and

website recognition for your school. Information about Engineering Alliance can be found in the PLTW press release and on the Engineering Alliance website. If you have questions about Engineering Alliance please contact Sandy Honour at shonour@tsaweb.org or 1-888-860-9010 (toll free).

<http://engineeringalliance.org/>



SmartDraw is the ideal floor plan software

Start with the exact template you need—not just a blank screen. Add your information and SmartDraw does the rest, aligning everything and applying professional design themes for great results every time. *Download Our Floor Plan Software FREE!*

<http://www.smartdraw.com/>



Learning Connection

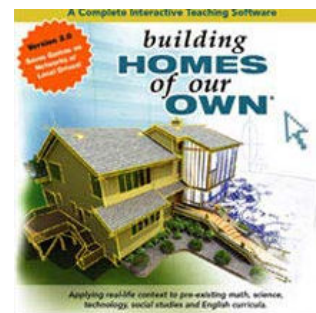
Developed by the Indiana Department of Education as part of a federal grant for developing statewide data systems.

Provides access to longitudinal student-level

data from numerous sources to support instructional decisions and increase student achievement; opportunities to collaborate with colleagues from across the state through the extensive suite of

communication tools; and, a common point of access for information from IDOE.

<https://learningconnection.doe.in.gov>



Building Homes of our Own

Good news! We found one last box of *Building Homes of Our Own* CD-Rom games. Although our grant for providing free single copies to educators has expired, we can liquidate these last copies for a shipping and handling fee of \$12.00. If you are interested in securing one or more copies of the game, please contact us at dhayashi@aha-comm.com.

<http://www.homesofourown.org/>

Welcome to the NASA Lunar Electric Rover (LER) Simulator

You don't need a driver's license, but you still need to buckle up as the LER Simulator gives you a glimpse of what it might be like to support the activities of a functioning Lunar Outpost. Get busy. You never know if your skills here will become a major part of the NASA Astronaut application process in the future.



<http://www.nasa.gov/multimedia/podcasting/nasaedge/iphone.html>



RubiStar is a free tool to help teachers create quality rubrics.

[http://
rubistar.4teachers.org/
index.php](http://rubistar.4teachers.org/index.php)

Indiana Robotics Educators grant has been funded once again for Summer 2010

Please register early and pass this information along to other teachers. We have a lot of robot kits to distribute. First year participants will receive a VEX Robotics Starter Kit, Autodesk Inventor Professional Software, Autodesk Curriculum, workshop CD and other items. Second year participants will receive a VEX Starter Kit, VEX

Sensor Kit, workshop CD and other items. Third year participants will receive a VisualEdge Competition Kit and workshop CD. The third year workshop is only available in Indianapolis. Select the link to schedule your summer date and location to participate!

[http://jotform.com/
form/10801735639](http://jotform.com/form/10801735639)



STAR-LITE laboratory



Interactive Training Environment) is an innovative and groundbreaking method to learn about laboratory safety techniques.

[http://
www.starlite.nih.gov/](http://www.starlite.nih.gov/)

POWER SUMMER CAMP July 11-17, 2010

Preparing Outstanding Women for Engineering Roles (POWER)

Power is a week-long summer residential camp for young ladies that will be entering 10th, 11th, and 12th grades. The POWER camp provides the opportunity to explore careers in engineering through hands-on activities and interaction with both professional female engineers and engineering college students.

[http://
www.engr.iupui.edu/
power/](http://www.engr.iupui.edu/power/)

Work with your colleagues (some humanoid, some not) to complete quests in a lab. The STAR-LITE laboratory can be chaotic

and safety violations will occur. You will make critical safety decisions to ensure that you and your colleagues work safely in a lab. STAR-LITE (Safe Techniques Advance Research — Laboratory

National TeacherRegistry

Welcome to the National Teacher Registry

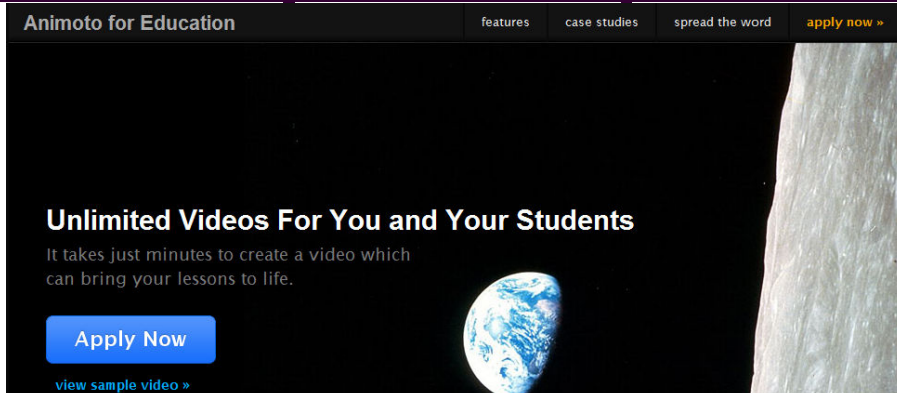
The National Teacher Registry is a free service for schools and teachers that enables them to create a list of the items they need for their classrooms.

Teachers do not receive enough money for the supplies they need for their classrooms. This is a growing problem with severe education budget cuts across the country.

Teachers often buy supplies with their own money but there is a limit to what they can afford to purchase. The National Teacher Registry is a free service for teachers, parents and/or other

contributors. Products are sourced from national suppliers and discounters. There is no markup. It is designed to help teachers communicate to parents and others, the supplies that they need for their classrooms.

[http://
www.nationalteacher
registry.com/](http://www.nationalteacherregistry.com/)



[Animoto.com for education](http://animoto.com/education)

If you are a teacher or educator, apply for a free Animoto all-access pass

for use in the classroom.

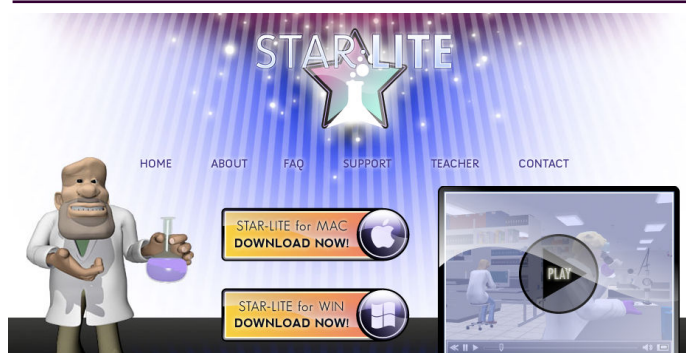
Produce unlimited full length videos from photos.

<http://animoto.com/education>



[How 3D scanners and printers work](#)

Jay Lenno shares how a 3D scanner and printer can be used in his automotive collection in Jay's garage.



[STAR-LITE laboratory](#)

Work with your colleagues (some humanoid, some not) to

complete quests in a lab.

The STAR-LITE laboratory can be chaotic and safety violations will occur.

You will make critical safety decisions to ensure that you and your colleagues work safely in a lab. STAR-LITE (Safe Techniques Advance Research — Laboratory Interactive Training Environment) is an innovative and groundbreaking method to learn about laboratory safety techniques.

<http://www.starlite.nih.gov/>

Architect Studio 3D

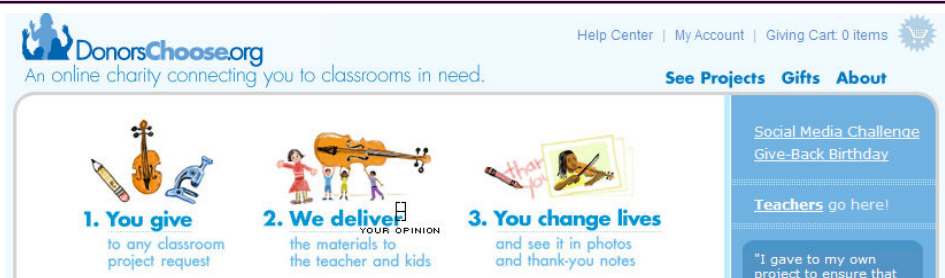
Design a House with Frank Lloyd Wright



[Design Studio](#)

On this Web site, you can design a house, walk through it in 3D, and then share it with the world. You can also learn more about architecture, past and present, and explore Frank Lloyd Wright's life and work.

<http://www.architectstudio3d.org/AS3d/home.html>



[DonorsChoose.org](http://www.donorschoose.org)

is a simple way to provide students in need with resources that our public schools often lack. At this not-for-profit web site, teachers submit project

proposals for materials or experiences their students need to learn. These ideas become classroom reality when concerned individuals, whom we call Citizen

Philanthropists, choose projects to fund.

<http://www.donorschoose.org>



Combining Academic and Technical Studies to Prepare Students for College and Careers

Students preparing for college and careers need access to career-focused programs of study that combine challenging academic content and intellectually demanding career/technical (CT) studies. Schools wanting to raise student achievement can create career-focused programs of study that connect a solid academic core with a sequence of CT courses.

<http://publications.sreb.org>



**START HERE
GO FURTHER**
FEDERAL STUDENT AID®

TEACH GRANT PROGRAM

Through the College Cost Reduction and Access Act of 2007, Congress created the Teacher Education Assistance for College and Higher Education (TEACH) Grant Program that provides grants of up to \$4,000 per

year to students who intend to teach in a public or private elementary or secondary school that serves students from low-income families. If you are interested in learning more about the TEACH Grant Program, you should contact the financial aid office at the college where you will be

enrolled to find out if they will participate in the TEACH Grant Program. For a listing of the TEACH Grant eligible institutions, click [here](#).

<http://studentaid.ed.gov/PORTALSWebApp/students/english/TEACH.jsp>



Public Service Loan Forgiveness Program

As a teacher in a public school or public service job you might be all eligible for the **Public Service Loan Forgiveness Program**.

Please be advised that your loans must be with The Federal Department of Education and they may also be able to help consolidate your loans for you.

A **Consolidation Loan** allows you to combine one or more of your federal education loans

into a new loan that offers you several advantages such as one monthly payment, flexible repayment options, and reduced monthly payments. For more details contact the Public Service Forgiveness Program at: Contact 1-800-848-0979

<http://www.finaid.org/loans/publicservice.phtml>



**START HERE
GO FURTHER**
FEDERAL STUDENT AID®

Federal Perkins "Loan" Cancellations for Teaching in a Designated Subject Shortage Area

This cancellation is based on full-time teaching if there is a shortage of teachers in your subject area. Each year the state education agency

determines any subject shortage areas in the elementary and secondary schools within the state.

Check with your local school system or state education agency to find out if your subject matter area has been so designated. If you teach full time in science,

mathematics, foreign language, or bilingual education, you qualify for cancellation even if the state has not designated one of these subject areas as a shortage area. the "Teacher Shortage Areas" a nationwide listing by content area.

<http://studentaid.ed.gov/PORTALSWebApp/students/english/cancelperk.jsp>

Mike Fitzgerald
Education Specialist
Indiana Department of Education
mfitzger@doe.in.gov
317-232-6990

It is the policy of the Indiana Department of Education not to discriminate on the basis of race, color, religion, sex, national origin, age, or disability, in its programs, activities, or employment policies as required by the Indiana Civil Rights Law (I.C. 22-9-1), Title VI and VII (Civil Rights Act of 1964), the Equal Pay Act of 1973, Title IX (Educational Amendments), Section 504 (Rehabilitation Act of 1973), and the Americans with Disabilities Act (42 USCS §12101, et. seq.).

Inquiries regarding compliance by the Indiana Department of Education with Title IX and other civil rights laws may be directed to the Human Resources Director, Indiana Department of Education, Room 229, State House, Indianapolis, IN 46204-2798, or by telephone to 317-232-6610, or the Director of the Office for Civil Rights, U.S. Department of Education, 111 North Canal Street, Suite 1053, Chicago, IL 60606-7204



GRANTS, AWARDS & OPPORTUNITIES

Indiana Robotics Educators grant has been funded once again for Summer 2010 Please register early and pass this information along to other teachers. We have a lot of robot kits to distribute. First year participants will receive a VEX Robotics Starter Kit, Autodesk Inventor Professional Software, Autodesk Curriculum, workshop CD and other items. Second year participants will receive a VEX Starter Kit, VEX Sensor Kit, workshop CD and other items. Third year participants will receive a VisualEdge Competition Kit and workshop CD. The third year workshop is only available in Indianapolis. Select the link to schedule your summer date and location to participate!

Shade Structure Program The American Academy of Dermatology's Shade Structure Program awards grants in the amount of \$8,000 each for the purchase of permanent shade structures designed to provide shade and ultraviolet(UV) ray protection for outdoor areas. The AAD also provides a permanent sign to be displayed near the shade structure that promotes the importance of sun safety. The AAD receives support for this program from Johnson & Johnson Consumer Products Company.

2010 Toyota International Teacher Program a fully-funded professional development program for U.S. educators. The program will take place November 20 – December 4, 2010 and the deadline to apply is May 26, 2010. Questions or more information, contact by email toyotateach@iie.org or by phone (toll-free) 877-832-2457.

Donors Choose Here's how it works: public school teachers from every corner of America post classroom project requests on DonorsChoose.org.

Welcome to the National Teacher Registry The National Teacher Registry is a free service for schools and teachers that enables them to create a list of the items they need for their classrooms.

Conexus Scholarships To increase the skill level of Indiana's advanced manufacturing and logistics workforce, Conexus Indiana is offering scholarships to students enrolling in a one-year certificate or two-year associate degree program for advanced manufacturing or logistics. Scholarships are limited to students who live in Central Indiana (Boone, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, or Shelby County). Applicants should be enrolled in a pre-engineering or another technical program at the high school level, and plan on pursuing a career in advanced manufacturing or logistics.

2010 Summer Guitar Making Workshops at Purdue Registration is open for the fourth summer of guitar making workshops. Join us for a week of fun and learning as you make your own custom electric guitar. There are three workshops so everyone can participate. Check it out at www.metalsound.org or contact Leza Dellinger at ldellin@purdue.edu, 765-494-1279.

LEGO Children's Fund The LEGO Children's Fund will provide quarterly grants for programs, either in part or in total, with a special interest paid to collaborative efforts and in providing matching funds to leverage new dollars into the receiving organization. We will give priority consideration to programs that both meet our goals and are supported in volunteer time and effort by our employees.

American Honda Foundation Grants Organizations working in the areas of youth and scientific education may be eligible for grants from the American Honda Foundation. Our policy is to seek out those programs and organizations with a well-defined sense of purpose, demonstrated commitment to making the best use of available resources and a reputation for accomplishing their objectives. The American Honda Foundation will make grants in the field of youth and scientific education.